



# Company Overview

## Radiation Control Board

Dan Shrum

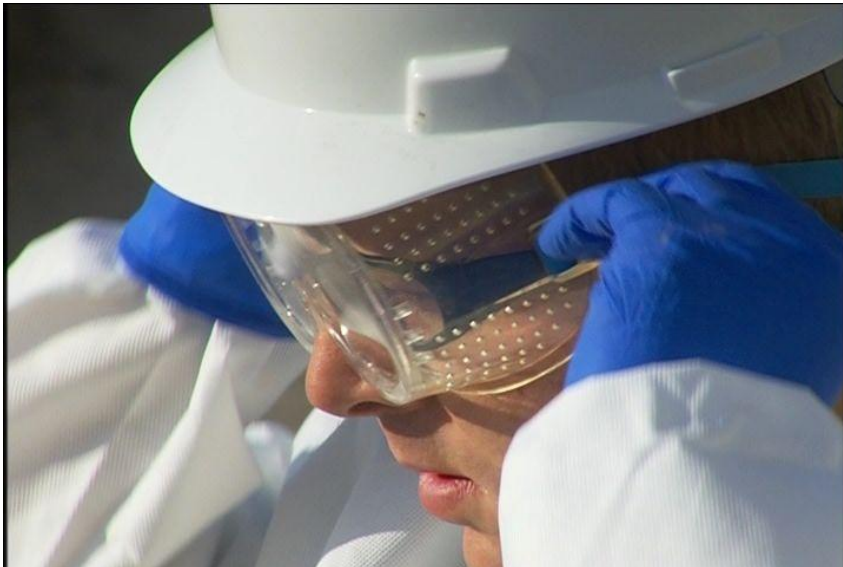
November 13, 2012



# Safety

## Clive:

- Safety culture initiative
- Last lost time injury November 2010  
(currently at >800,000 hours without lost time injury)
- Finished 2011 with 0 recordables/0 Lost time
- 2012 – 1 recordable/0 Lost time





EnergySolutions is the largest nuclear materials management company in the world with \$2 billion of revenue annually. We offer a full range of services across the nuclear fuel cycle for both commercial and government clients such as:

- Nuclear Utilities (i.e.: Exelon, Duke, Dominion)
- Nuclear Fuel Fabrication Facilities
- Uranium Mines, Mills, Enrichment
- Environmental restoration and ongoing operations for DOE, DOD, Navy
- Pharmaceutical, Research Labs, Universities, Industrial Facilities





# Fixed Facilities

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## Clive, UT

- LLRW Disposal Site



## Kingston, TN

- Manufacture Railcars
- Hwy Trans Base



## Oak Ridge, TN

- Treatment & Processing
- Volume Reduction



## Memphis, TN

- Nuclear Component Ops
- Barge, Rail, Hwy Access



## Oak Ridge, TN

- Manufacture Uranium for
- DOD/DOE/Navy



## Barnwell, SC

- Class A/B/C LLRW Disposal



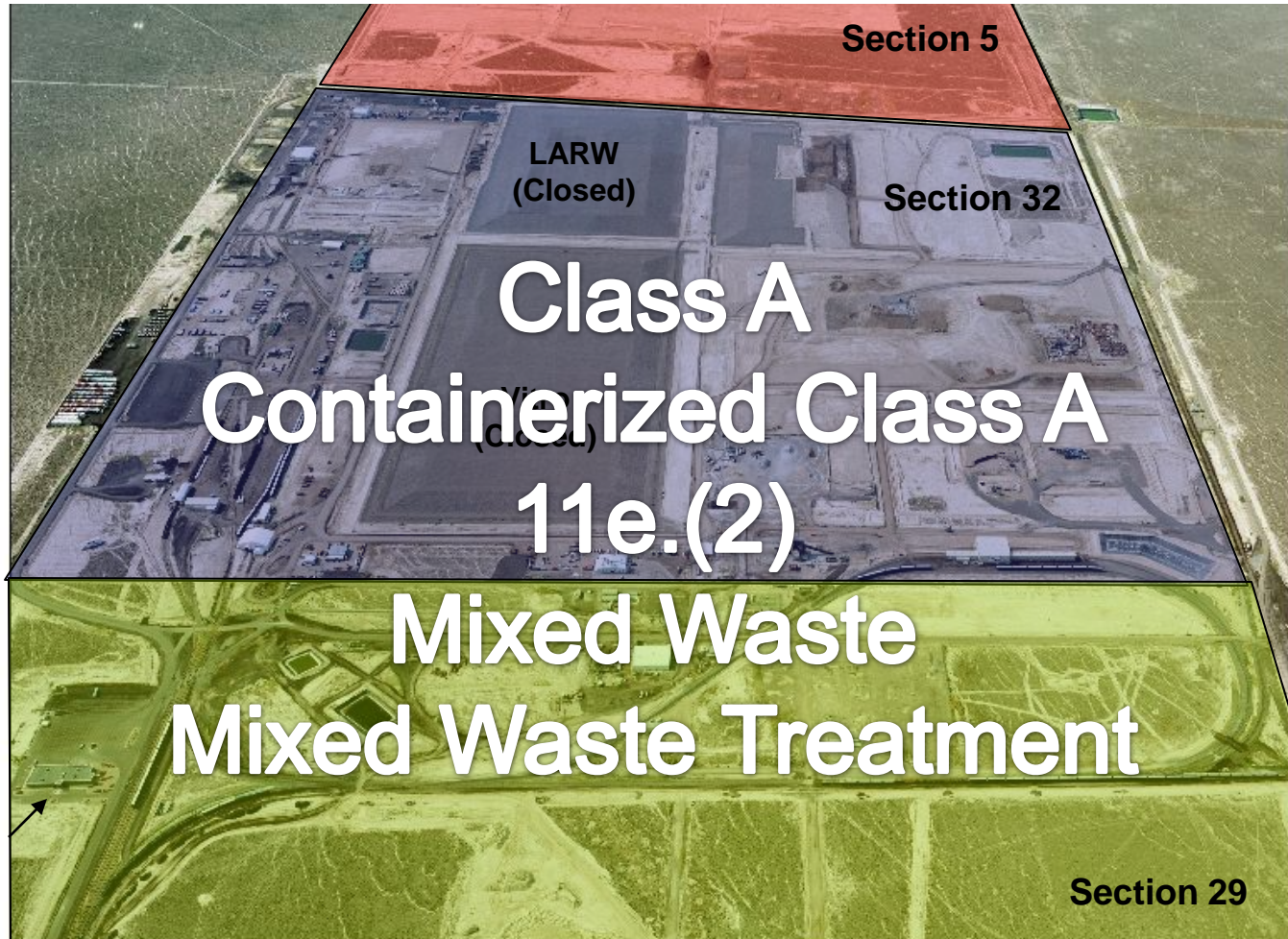
# Clive Facility Mission

Protect the Environment by safely disposing of Class A Radioactive Waste in regulated, engineered disposal embankments (cells)





# Site Layout





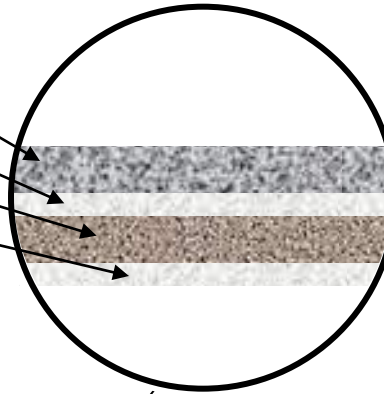
# Embankment Construction

Rip Rap 18 in (48 cm)

Type A Filter 6 in (15 cm)

Sac. Soil 12 in (30 cm)

Type B Filter 6 in (15 cm)



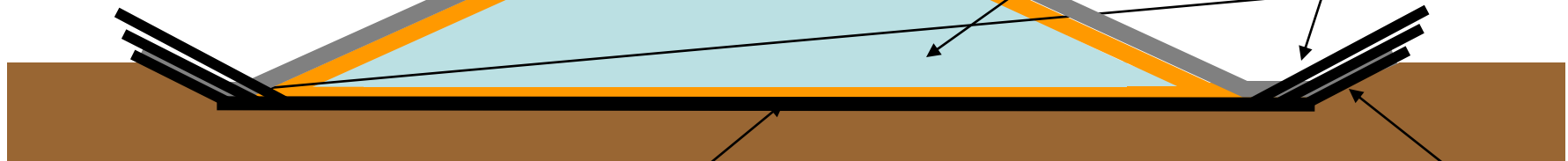
- Mixed Waste**

Install Engineered Cover

Layers of Waste Compacted and Disposed

Install Radon Barrier (Clay Cap)  
2 ft (61 cm)

Synthetic Liner with  
Leachate Collection System

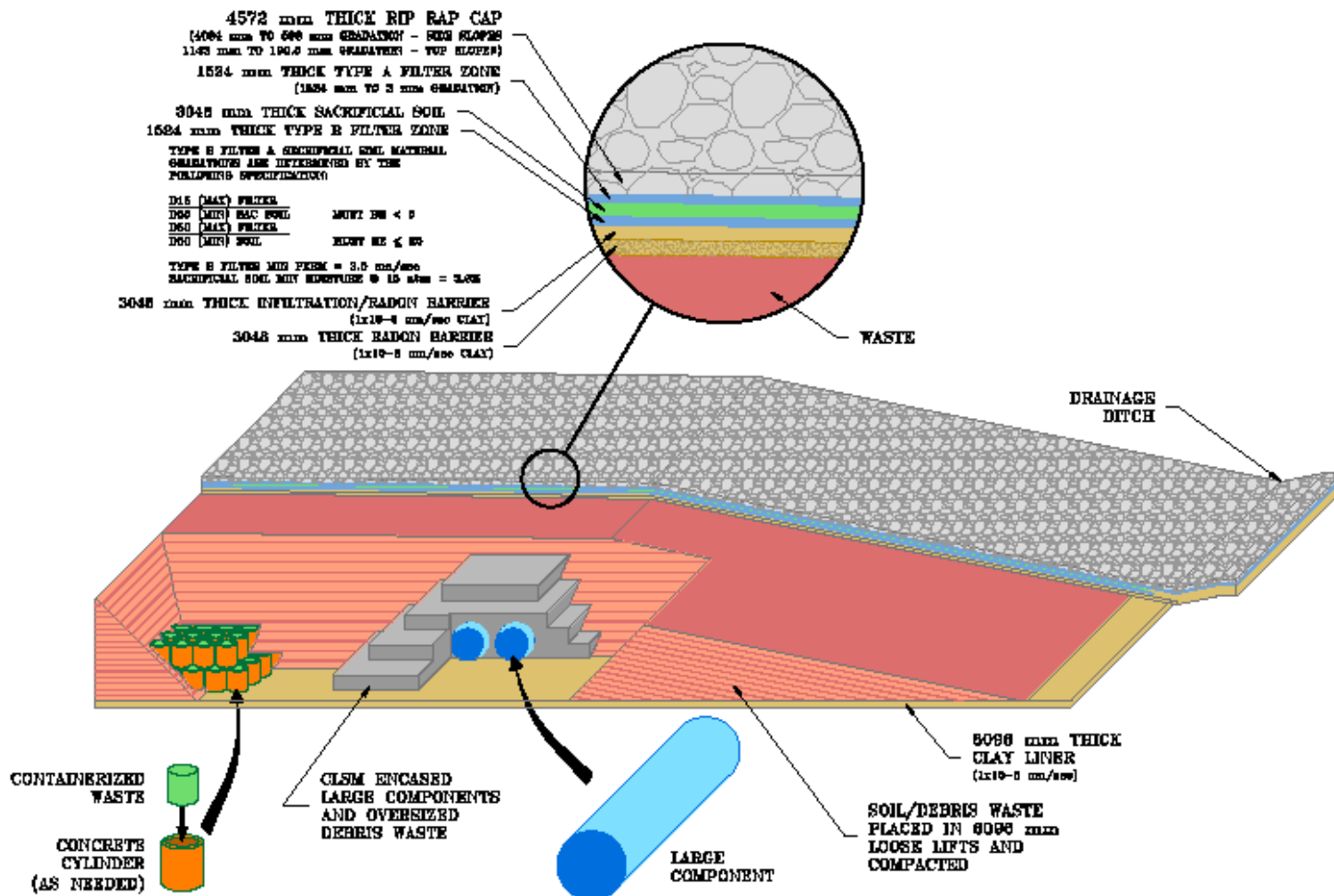


Install and Approve Clay Liner

Excavate ~ 10 ft.



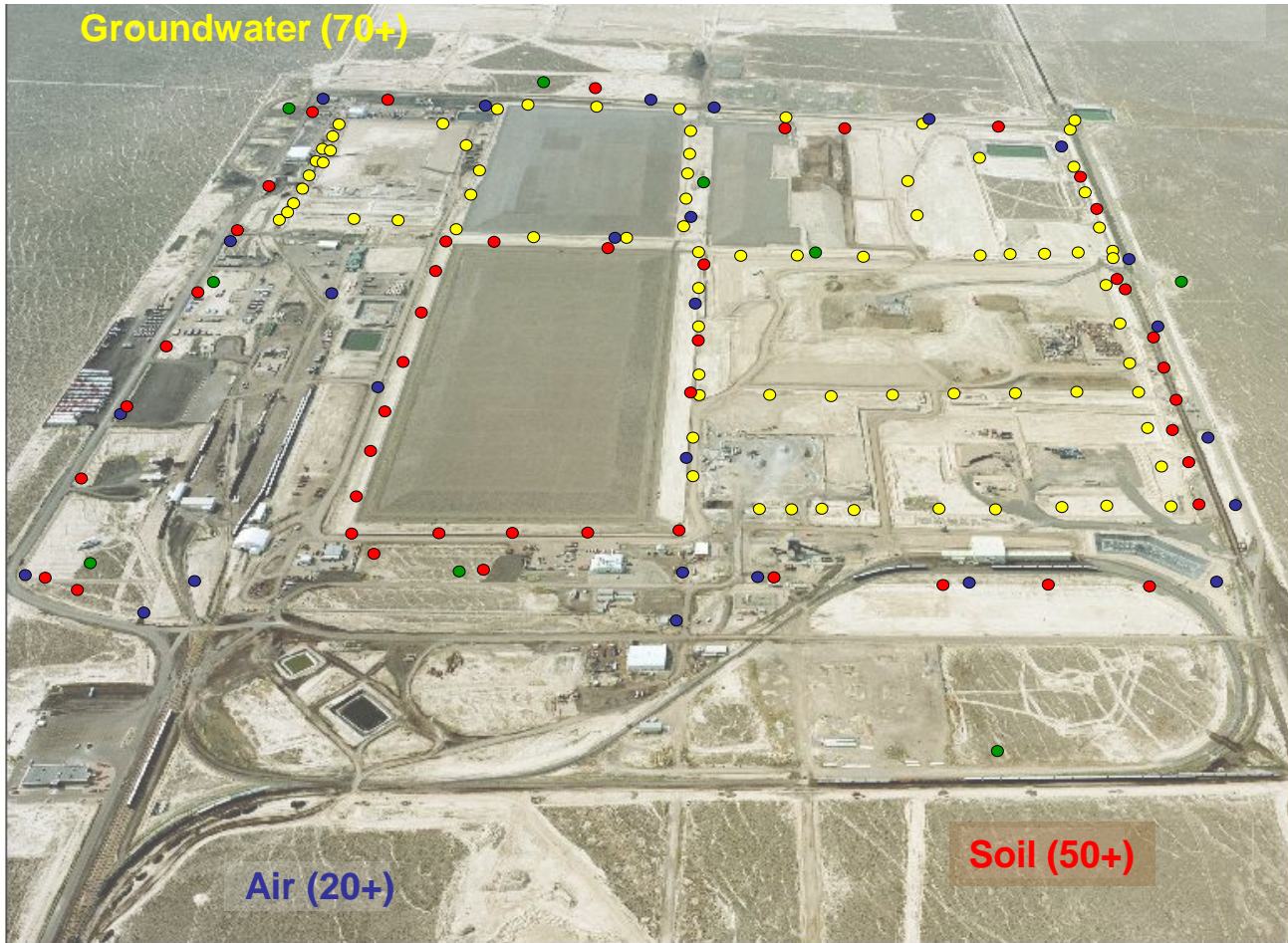
# Composite View







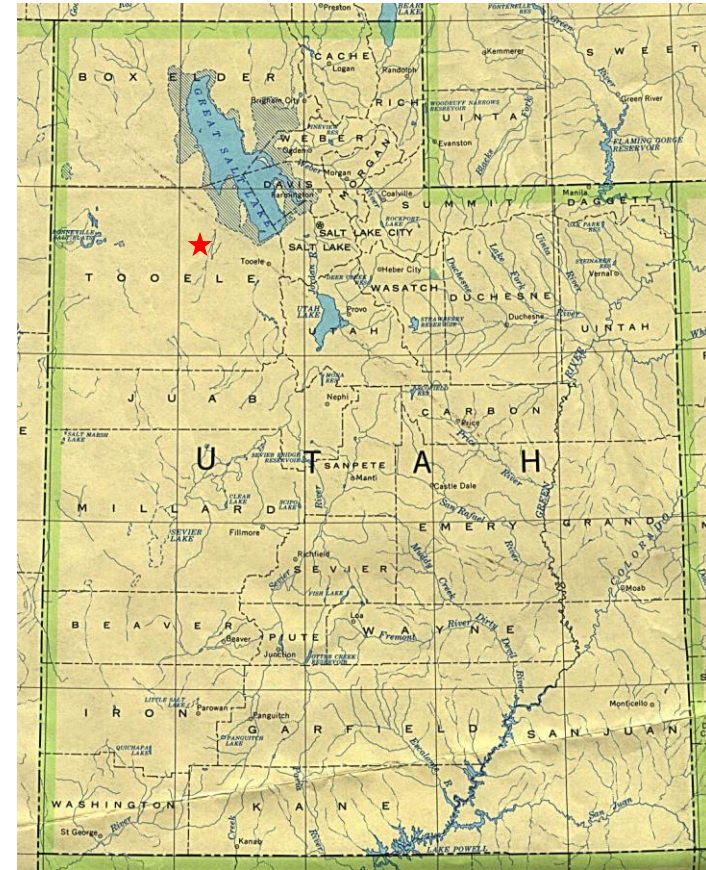
# Environment





# Location

- Remote location
  - 7 miles to nearest resident
  - 35 miles to nearest population center
- Abundance of embankment construction materials
  - Clay
  - Sand
  - Rock
- Arid Climate
  - Low precipitation
  - High evaporation
- Naturally poor aquifer
- Proximity to rail line and interstate highway







# Regulators



- Utah
  - Division of Radiation Control
  - Division of Solid and Hazardous Waste
  - Air Quality
  - Water Quality



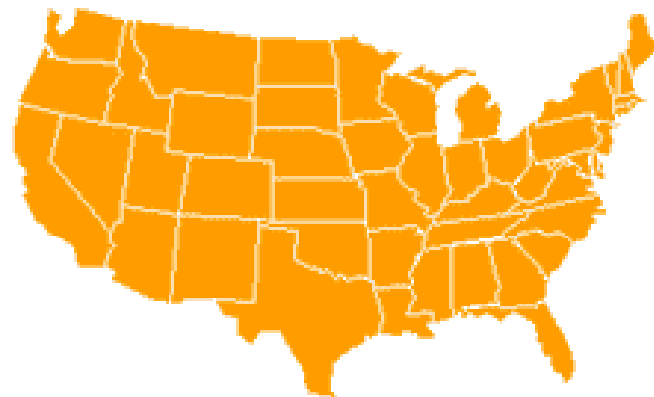




# Regulators



- Federal
  - Nuclear Regulatory Commission
  - Environmental Protection Agency
  - OSHA





# Tours



We welcome members of the Utah Radiation Control Board and members of the public to tour the Clive facility – the tour is much better than my slide presentation!!



# Thanks

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